UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
SUPERFUND DIVISION
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

JAN 0 9 2013

RETURN RECEIPT REQUESTED

Robert Owens, Project Manager
EA Engineering, Science, and Technology, Inc.
405 S. Highway 121, Suite C-100
Lewisville, Tx 75067

Re: Comments
"Field Sampling Plan" and "Quality Assurance Project Plan" (Revision 00, 11/06/12)
"Site Management Plan" (Revision 00, 10/30/12)
Remedial Investigation and Feasibility Study
Falcon Refinery Superfund Site; Ingleside, San Patricio County, Texas
EPA Region 6 Remedial Action Contract 2
Contract: EP-W-06-004; Task Order: 0088-RICO-06MC

Dear Mr. Owens:

The purpose of this letter is to document the U.S. Environmental Protection Agency's (EPA, Region 6) comments concerning the "Draft Quality Assurance Project Plan" (QAPP, Revision 00, 11/06/12), "Draft Field Sampling Plan" (FSP, Revision 00, 11/06/12), and "Draft Site Management Plan" (SMP, Revision 00, 10/30/12). The "Remedial Investigation and Feasibility Study" (RI/FS) plans were submitted by EA Engineering, Science, and Technology, Inc. (EA) for the Falcon Refinery Superfund Site (Site) under Task Order 0088.

Enclosure A (Comments, "Draft Field Sampling Plan," "Draft Quality Assurance Project Plan," and "Draft Site Management Plan") includes the comments that need to be incorporated into the subject plans. According to the approved RI/FS Work Plan, these final plans should be submitted to the EPA within seven (7) days following the receipt of the EPA's comments. The EPA's comments considered the comments provided by the Texas Commission on Environmental Quality and the federal/state natural resource trustees. The EPA's comments should not delay the field work planned for the Site or the collection of access agreements.

Please call me, at (214) 665-7167, or Rafael Casanova (Alternate Task Order Monitor), at (214) 665-7437, if you have any questions or comments concerning this letter.

Sincerely yours,

Brian Mueller
Remedial Project Manager

Enclosure

9558091

cc: Anna Milburn (U.S. Environmental Protection Agency, Region 6)
Kenneth Shewmake (U.S. Environmental Protection Agency, Region 6)
Phillip Winsor (Texas Commission on Environmental Quality)
Richard Seiler (Texas Commission on Environmental Quality)
Vickie Reat (Texas Commission on Environmental Quality)
Jessica White (National Oceanic and Atmospheric Administration)
Clare Lee (U.S. Fish and Wildlife Service)
Barry Forsythe (U.S. Fish and Wildlife Service)
Don Pitts (Texas Parks and Wildlife Department)
Andy Tirpak (Texas Parks and Wildlife Department)
Jane Sarosdy (Texas General Land Office)
Tommy Mobley (Texas General Land Office)

ENCLOSURE A
COMMENTS
DRAFT FIELD SAMPLING PLAN (REVISION 00, 11/06/12)
DRAFT QUALITY ASSURANCE PROJECT PLAN (REVISION 00, 11/06/12)
DRAFT SITE MANAGEMENT PLAN (REVISION 00; 10/30/12)

Enclosure A (Comments, "Draft Field Sampling Plan," "Draft Quality Assurance Project Plan," and "Draft Site Management Plan") includes the comments that need to be incorporated into the subject final plans. According to the approved Work Plan, the final plans should be submitted to the EPA within seven (7) days following the receipt of the EPA's comments. The EPA's comments considered the comments provided by the Texas Commission on Environmental Quality and the federal/state natural resource trustees. The EPA's comments should not delay the collection of access agreements or the field work planned for the Site.

Draft Field Sampling Plan

1. Ground Water Sampling Locations

The Final FSP shall discuss the additional sampling for the following areas within Area of Concern 1 North Site (AOC 1 N) where chemical concentrations exceeded ground water screening levels during the Phase I RI/FS (the nomenclature was assigned by the PRP) and any ground water contamination that could be attributed to Great Plains Marketing (currently under voluntary cleanup program under State regulations):

a. TW01-01: Naphthalene, detected in the ground water, exceeded the EPA human health screening level.

b. TW01-02: Benzene, detected in the ground water, exceeded the EPA human health screening level. The map provided by NORCO, in the Phase I data, did not reflect this exceedance. Ethylbenzene, naphthalene, and xylene (total), detected in the ground water, did not exceed human health screening levels but are common petroleum refinery pollutants.

c. TW01-07: Benzene, detected in the ground water, exceeded the federal "maximum contaminant level" (MCL) for drinking water and the TCEQ human health screening level. N-butylbenzene, detected in the ground water, exceeded the EPA human health screening level. Ethylbenzene and naphthalene, detected in the ground water, did not exceed human health screening levels but are common petroleum refinery pollutants.

d. TW01-11: Benzene, detected in the ground water, exceeded the TCEQ human health screening level. Naphthalene, n-butylbenzene, and 2-methynaphthalene,

detected in the ground water, exceeded the EPA human health screening level. Ethylbenzene and toluene, detected in the ground water, did not exceed human health screening levels but are common petroleum refinery pollutants.

e. TW01-12: Naphthalene, detected in the ground water, exceeded the EPA human health screening level.

f. TW01-18: Benzene, detected in the ground water, exceeded the EPA human health screening level. The map provided by the PRP, in the Phase I data, did not reflect this exceedance. Ethylbenzene, toluene, and xylene (total), detected in the ground water, did not exceed human health screening levels but are common petroleum refinery pollutants.

2. Soil Sampling Locations

The Final FSP shall discuss the additional sampling for the following areas within AOC 1 (South Site) where chemical concentrations exceeded soil screening levels during Phase I and where Superior Crude hydrocarbon spills have been documented in the past:

a. J-03S, J-04S, and J-09S: Several semi-volatile organic compounds, detected in the surface soil, exceeded the TCEQ and/or the EPA human health screening level.

b. J-05S and J-10S: 1,3,5-trimethylbenzene, detected in the subsurface soil, exceeded the EPA human health screening level.

3. Redfish Bay Sediment Sampling Locations

The Final FSP shall discuss the additional sampling for the following areas within AOC 5 (Redfish Bay) where chemical concentrations exceeded sediment screening levels during the Phase I RI:

a. J-60SD: Several semi-volatile organic compounds, detected in the sediments, exceed their respective ecological screening levels. Also, chromium, mercury, and zinc, detected in the sediments, exceeded their respective ecological screening levels.

4. New "Integrated Risk Information System" Values for Polychlorinated Biphenyls

The Final FSP and/or QAPP shall discuss the new "Integrated Risk Information System" (IRIS) values which are being proposed for polychlorinated biphenyls (PCBs) and which are expected to be finalized in June 2013. Following are the preliminary values from the draft document:

- For Aroclor 1254, at a cancer risk of 1.0×10^{-5}, the current value is 1.1 parts per million (ppm) for a residential scenario, the new draft proposed value is 0.017 ppm.

- For Aroclor 1254, at a cancer risk of 1.0×10^{-5}, the current value is 11.0 ppm for an industrial scenario, the new draft proposed value is 0.18 ppm.

- For Aroclor 1016, at a cancer risk of 1.0×10^{-5}, the draft value is 3.9 ppm for a residential scenario and 37.0 ppm for an industrial scenario.

5. Toxicity Equivalent Factors for Dioxin-Like Compounds

The Final FSP and/or QAPP shall discuss the new "dioxin" guidance document titled, "Recommended Toxicity Equivalence Factors (TEFs) for Human Health Risk Assessments of 2,3,7,8-Tetrachlorodibenzo-p-dioxin and Dioxin-Like Compounds." This document establishes new values for dioxin-like PCBs and describes a toxicity equivalence factor (TEF) method for evaluating PCB congeners.

6. Data Reduction

The Final FSP and/or QAPP shall include statements concerning "data reduction." The following examples of statements should be considered during the data reduction phase of the RI/FS for the Site:

- A chemical will be carried forward into the risk assessments at one-half the detection limit if a chemical's detection limit is higher than its respective screening value.

- If a chemical is reported in a field sample and in a method blank or field blank, it will be considered as a positive identification if the chemical is present in the field sample at a concentration greater than 10 times (for common laboratory contaminants) or 5 times (for all other substances) the maximum concentration reported in any blank. Common laboratory contaminants include acetone, methylene chloride, methyl ethyl ketone (2-butanone), phthalate esters, and toluene.

- All data with "estimated" qualifiers will be assumed to be positive identifications for the chemical in that medium and the corresponding reported concentrations will be used.

7. Section 1.1 — Site Background and Description (Page 1)

Draft Field Sampling Plan

The Draft FSP states that the refinery operates intermittently.

EPA's Comments

The Final FSP shall be amended to state that, ". . . operated intermittently and has not produced hydrocarbon products in several years."

8. Section 1.1.1 — Purpose of the Investigation and Sampling Events (Page 3)

Draft Field Sampling Plan

The Draft FSP references Section 1.3.2.3.

EPA's Comments

The Final FSP shall be amended to remove references to Section 1.3.2.3., since it could not be located.

9. Section 1.3 — Project Objectives (Page 3)

Draft Field Sampling Plan

The Draft FSP, in several sections, states that, "20% of the samples will be analyzed for polychlorinated biphenyls (PCBs) and herbicides/pesticides. Roughly half the PCB samples (about 10% of the total samples) will be analyzed for PCB congeners."

EPA's Comments

The Final FSP shall be amended to state that the EPA's Task Order Monitor (TOM) will determine the number of PCBs (assuming total Aroclors) and PCB congeners field data that will be collected and analyzed based on the frequency of detection of these chemicals from the previous data collected by the PRP for the Site. This additional text shall be included in all of the appropriate sections of the FSP and QAPP. The proposed values of 20% and 10% for total PCBs and congeners, respectively, may be excessive based on the EPA's preliminary review of the previous Phase I data for the Site.

10. Section 1.3 — Project Objectives (Page 4)

Draft Field Sampling Plan

The Draft FSP states that, "An ecological characterization may be conducted after consultation with EPA. This characterization may include wetland or habitat delineation, wildlife observations, or ecological toxicity tests."

EPA's Comments

The Final FSP shall be amended to state that, "An ecological characterization may be conducted if the previous ecological characterization is not of the quality needed for this RI/FS." This additional text shall be included in the appropriate sections of the Final FSP and QAPP.

11. Section 1.3 — Project Objectives (Page 4)

Draft Field Sampling Plan

The Draft FSP states that, "Fish tissue samples (up to 16 samples) will be collected from the site."

EPA's Comments

The Final FSP should be amended to state that "Fish tissue samples will be collected, and analyzed, based on the results of the "Screening Level Ecological Risk Assessment." This additional text shall be included in the appropriate sections of the Final FSP and QAPP.

12. Section 1.3 — Project Objectives (Page 6)

Draft Field Sampling Plan

The Draft FSP states that, ". . . the FS Report will be prepared to provide a detailed analysis of alternatives and cost-effectiveness analysis."

EPA's Comments

The Final FSP should be amended to state that, ". . . the FS Report will be prepared to provide a detailed analysis of alternatives and cost-effectiveness analysis, and will include the nine criteria in the National Contingency Plan." This additional text shall be included in the appropriate sections of the Final FSP and QAPP.

13. Section 2.1.6 — Fish Tissue (Page 10)

Draft Field Sampling Plan

The Draft FSP states that, "It is likely that fish will be removed from the site via fish shocking.

EPA's Comments

The Final FSP shall be amended to state that, "The EPA and the U.S. Fish and Wildlife Service will consider techniques for the collection of fish tissue data, based on the results of the SLERA."

14. Section 2.6 — Consent for Property Access (Page 16)

Draft Field Sampling Plan

The Draft FSP states that, "EPA will obtain consent for property access agreements from the private property owners that have been identified for investigation under the RI/FS."

EPA's Comments

The Final FSP should be amended to state that, "EA will obtain consent for property access agreements from the private property owners whose properties have been identified for investigation under the RI/FS. The EPA will provide draft access agreements to EA for use during this effort. The EPA will assist EA if a property owner does not provide access to critical areas of the Site." This additional text shall be included in the appropriate sections of the Final FSP and QAPP.

15. Section 3.8 — Background Locations (Page 21)

Draft Field Sampling Plan

The Draft FSP describes the sample design matrix for background data for all media.

EPA's Comments

The Final FSP shall be amended to include the rationale for the selection of background sampling locations (*e.g.*, collected from areas unaffected by Site activities, etc) and the number of samples that will collected and analyzed. The Final FSP shall state that, "Background reference areas will be based on media with similar characteristics to the media associated with the AOC being investigated. Additionally, the background reference areas shall have the same physical, chemical, geological, and biological characteristics as the Site, but have not been

affected by activities on the Site. Also, background sample locations should not be established at locations directly influenced by, or in close proximity to, obvious sources (*e.g.*, other sites, storm water and point source outfalls, bridges, and roadways, etc)."

Draft Quality Assurance Project Plan

1. Distribution List (Page 1)

Draft Quality Assurance Project Plan

The Draft QAPP includes the distribution list for documents associated with the Site.

EPA's Comments

The Final QAPP shall be amended to include Phillip Winsor, instead of Danielle Sattman, as the TCEQ's Project Manager.

2. Section 1.0 — Project Description and Management (Page 1)

Draft QAPP

The Draft QAPP includes Figure 1 (Project Organization).

EPA's Comments

Figure 1, of the Final QAPP, shall be amended to include TCEQ's Project Manager, EPA's and TCEQ's human health and ecological risk assessors, and the State/Federal natural resource trustees.

3. Section 1.1 — Problem Definition and Background (Page 3)

Draft QAPP

The Draft QAPP references Sections 1.1.2 (National Priorities List [NPL]) and 1.1.3 (Removal Action [RA]).

EPA's Comments

The Final QAPP shall be amended to include information concerning the NPL and the RA being conducted under an administrative order.

4. **Section 1.2.1 — Project Objectives (Page 7)**

Draft QAPP

The Draft QAPP, under the section titled "Alternatives Development and Screening Memorandum" (ADSM) provides a reference to "applicable or relevant and appropriate requirements."

EPA's Comments

The Final QAPP shall describe the preliminary "applicable or relevant and appropriate requirements" (ARARs) that could be applicable to the Site. Additionally, these ARARs shall be summarized in table format. ARARs should be included early in the RI/FS process since ARARs could be used as screening levels.

5. **Section 1.3.2.1 — Conceptual Site Model (Page 15)**

Draft QAPP

The Draft QAPP states that, "Additional background samples will be collected during the Phase II investigation and a background study completed."

EPA's Comments

This Final QAPP shall be amended to include that, "Background reference areas will be based on media with similar characteristics to the media associated with the AOC being investigated. Additionally, the background reference areas shall have the same physical, chemical, geological, and biological characteristics as the Site, but have not been affected by activities on the Site. Also, background sample locations should not be established at locations directly influenced by, or in close proximity to, obvious sources (*e.g.*, other sites, storm water and point source outfalls, bridges, and roadways, etc)."

6. **Section 1.3.2.2 — Planning Team Members and Stakeholders (Page 10)**

Draft QAPP

The Draft QAPP identifies the stakeholders for the Site.

EPA's Comments

The Final QAPP shall be amended to include TCEQ's Project Manager, EPA's and TCEQ's human health and ecological risk assessors, and the State/Federal natural resource trustees.

7. Section 1.3.4.1 — Necessary Information and Sources (Page 18)

Draft QAPP

The Draft QAPP states that, "An ecological habitat survey may be conducted to narrow or broaden the potential receptors of concern."

EPA's Comments

The Final QAPP shall be amended to state that, "An ecological habitat survey may conducted if the previous ecological characterization performed by the PRP's contractor is not of the quality needed for this RI/FS."

8. Section 1.3.4.2 — Basis of Information (Page 19)

Draft QAPP

The text of the first bullet of the Draft QAPP describes the use of the Phase I and II data.

EPA's Comments

The Final QAPP shall be amended to state that, "An evaluation will be performed of previous Phase I investigation data and the Phase II investigation data to be acquired."

9. Section 1.3.5.1 — Target Population (Page 21)

Draft QAPP

The Draft QAPP states that, "The site is divided into seven different AOCs as described in Section 1.3.2.1."

EPA's Comments

The Final QAPP shall be amended to state that, "The site is divided into seven different AOCs as described in Section 1.3.2.3."

10. Section 1.3.6.2 — Action Level Decision Rule (Page 23)

Draft QAPP

Appendix A (Reference Tables) of the Draft QAPP identifies the primary screening levels and contract-required quantitation limits (CRQLs) for the "chemicals of potential concern (COPCs), which are based on EPA residential RSLs. Reference values for COPCs for surface soil are provided in Table A-3.

EPA's Comments

Appendix A lists a subset of COPCs that may be of concern in, for example, surface soil rather than the screening values for all COPC's. Given that the Phase II sampling has not been implemented, it is premature to refine the list of COPC's. Appendix A shall be amended to include all COPCs. Additionally, Appendix A shall identify the human health and ecological screening levels which are less than their respective contract-required quantitation limits or method quantitation limits (depending on the terminology used by the laboratory). The Final QAPP, and FSP where appropriate, shall identify the rationale (*e.g.*, data reduction) for addressing these chemicals in the human health and ecological risk assessments.

11. Table A-11 — Reference Limits for Contaminates in Fish (Page A-11-1)

Draft QAPP

Table A-11, of the Draft QAPP, provides reference limits for contaminants in fish.

EPA's Comments

Table A-11, of the Final QAPP, shall provide the source utilized to derive the reference concentrations in fish.

Draft Site Management Plan

1. Section 1.0 — Introduction (Page 1)

Draft SMP

The Draft SMP states that Rafael Casanova is the TOM for the Site.

EPA's Comments

The Final SMP should be amended to include Brian Mueller as the EPA's TOM and Rafael Casanova as the "alternate TOM" for the Site.

2. Section 2.0 — Security (Page 3)

Draft SMP

The Draft SMP states that, "Due to the proximity to the border, EA sample teams will consist of two or more persons."

EPA's Comments

The Final SMP shall be amended to exclude the statement concerning the border.

3. Section 3.0 — Site Access (Page 4)

Draft SMP

The Draft SMP states that, "EPA and EA will coordinate to provide access agreements for the properties that are subject to investigation."

EPA's Comments

The Final SMP shall be amended to state that, "EPA and EA will coordinate to provide access agreements for the properties that are subject to investigation; however, EA will take the lead in obtaining signed access agreements."

4. Section 7.3 — Site Manager (Page 5)

Draft SMP

The Draft SMP states that, "The SM will manage the daily activities at the site and will coordinate communications between subcontractor, local emergency response, local government, EPA, and Texas Commission on Environmental Quality personnel as appropriate."

EPA's Comments

The Final SMP shall be amended to state that, "The SM will manage the daily activities at the Site and will coordinate communications between subcontractor, local emergency response, local government, EPA, Texas Commission on Environmental Quality personnel, and the State and Federal natural resource trustees as appropriate."

Data Management Plan

1. Section 2.1 — Environmental Sampling and Analysis Overview (Page 2)

Draft DMP

The Draft DMP discusses "data validation."

EPA's Comments

The Final DMP shall be amended to state that, "The samples that are submitted through the Houston Contract Lab Program (CLP) for analyses will be validated by the CLP."